



NEUROBICS: BRAIN GAMES PREVENT POST-OP DELIRIUM REPORT #2882

BACKGROUND: Delirium happens when a person has sudden confusion or a sudden change in mental status. The person may have trouble paying attention or thinking clearly and may act disoriented or distracted. Delirium requires treatment and often hospitalization. It is not a disease, but rather a changed mental state. Delirium and dementia have some similarities but are not the same. Delirium mostly affects a person's attention, where dementia affects memory. Delirium is a temporary state that begins suddenly, where dementia is chronic, or long-term, confusion that usually begins gradually and worsens over time. However, someone can have both delirium and dementia.

(Source: <https://my.clevelandclinic.org/health/diseases/15252-delirium>)

RISKS AND SIGNS: Age plays a role in the development of delirium, but the severity of the current illness, the patient's normal level of day-to-day function, and the overall health of the patient play a part as well. Those at risk can be elderly and older adults; individuals with dementia, Alzheimer's disease or another type of mental health disorder; individuals with depression; surgery patients; and patients with longer hospital stays. Before a patient begins to show signs of delirium, there is an earlier phase that patients can experience for hours or even days prior. During this time frame, patients may report extremely vivid dreams, difficulty sleeping, a heightened state of fear or anxiety that wasn't present before and may start to request the constant presence of another in their room. There is no test for delirium, and it cannot be diagnosed through lab work. It must be diagnosed by observing the behavior of the patient and determining if their behavior fits the diagnosis of delirium.

(Source: <https://www.verywellhealth.com/delirium-what-you-should-know-3156864>)

NEUROBICS AIDS IN RECOVERY: A study by researchers at The Ohio State University Wexner Medical Center finds the brain can be prepared for surgery just as the body can. Experts call this "neurobics": brain exercises designed to create new neural pathways and increase cognition. To study the effects of neurobics on delirium prevention, researchers gave 251 pre-surgical patients over the age of 60 a tablet loaded with a brain-game app and asked them to play an hour of games each day for 10 days leading up to a major procedure requiring general anesthesia. "Not all patients played the games as much as we asked, but those who played any at all saw some benefit," said Dr. Michelle Humeidan, an anesthesiologist at Ohio State Wexner Medical Center and lead author of the study. "Patients who practiced neurobics were 40 percent less likely to experience postoperative delirium than those who did not, and the results improved the more hours they played." Those who played five to ten hours cut their risk by more than half, and those who played the prescribed ten hours or more had a 61 percent reduction in delirium rates compared to the control group.

(Source: <https://www.hmpgloballearningnetwork.com/site/jic/news/study-playing-brain-games-surgery-helps-improve-recovery>)

✉ **For More Information, Contact:**

Amy Colgan, Public Relations
amy.colgan@osumc.edu

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